HS SEDI
Homeland Security Systems Engineering and Development Institute

Homeland Security
An Overview

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Homeland Security Science and Technology Advisory Committee

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Homeland Security

HS SEDI is a trademark of the U S Department of Homeland Security (DHS)
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Outline

1. DHS Overview
   - Missions & Goals
   - Organization
   - Interagency Process
   - Congressional Oversight
2. Defining Homeland Security
3. Anatomy of National Response & Preparedness
4. Key Challenges
   - Optimizing for Extreme & Diverse Range of Threats
   - Managing Risk & Enhancing Resilience
   - Integrating Key Functions, Unifying the Enterprise

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DHS Overview

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DHS Facts

- Creation of DHS in 2004 constituted most significant government reorganization since the National Security Act of 1947
- DHS constitutes the most diverse merger of federal functions and responsibilities, incorporating 22 government agencies into a single organization.
- With over 200,000 employees, DHS is third largest federal agency

Total Federal Homeland Security Mission, and DHS Budgets

Dept	FY2012 Enacted	FY2013 Request	FY2013 Req % of Total
DHS	35,214.7	35,533.7	51.57%
Total	67,988.0	68,905.2	100%

www.whithouse.gov: Appendix -- Homeland Security Mission Funding by Agency

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2010 QHSR Missions & Goals

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1. Preventing & Protecting Against Terrorism

Goal 1: Prevent Terrorism

Goal 2: Prevent Unauthorized Acquisition or Use of CBRN Materials & Capabilities

Goal 3: Manage Risks to Critical Infrastructure

2. Securing & Managing Our Borders

Goal 1: Effectively Control U.S. Air, Land, and Sea Borders while expediting safe flow of travel & commerce

Goal 2: Safeguard Lawful Trade and Travel: Ensure security and resilience of global movement systems.

Goal 3: Disrupt Criminal Organizations: Disrupt & dismantle transnational smuggling & trafficking across US border

3. Enforcing & Administering Our Immigration Laws

Goal 1: Strengthen and Effectively Administer the Immigration System

Goal 2: Prevent Unlawful Immigration: Reduce conditions encouraging illegal entry in US, while removing illegals

4. Safeguarding & Securing Cyberspace

Goal 1: Create a Safe Cyber Environment: Malicious actors are unable to impair safe & secure use of cyberspace

Goal 2: Prevent Hostile Exploitation of Cyberspace.

5. Ensuring Resilience to Disasters

Goal 1: Mitigate Hazards: Strengthen capacity at all levels of society to withstand threats and hazards

Goal 2: Enhance Preparedness: Engage all levels and segments of society in improving preparedness.

Goal 3: Ensure Effective Emergency Response capacity Nationwide.

Goal 4: Rapidly Recover: Improve the Nation's ability to adapt and rapidly recover

Maturing & Strengthening the Homeland Security Enterprise

-- Ensure Real-Time Shared Awareness -- Build Capable Communities -- Foster Unity of Effort

-- Foster Innovative Approaches &Solutions Through Leading-Edge S&T

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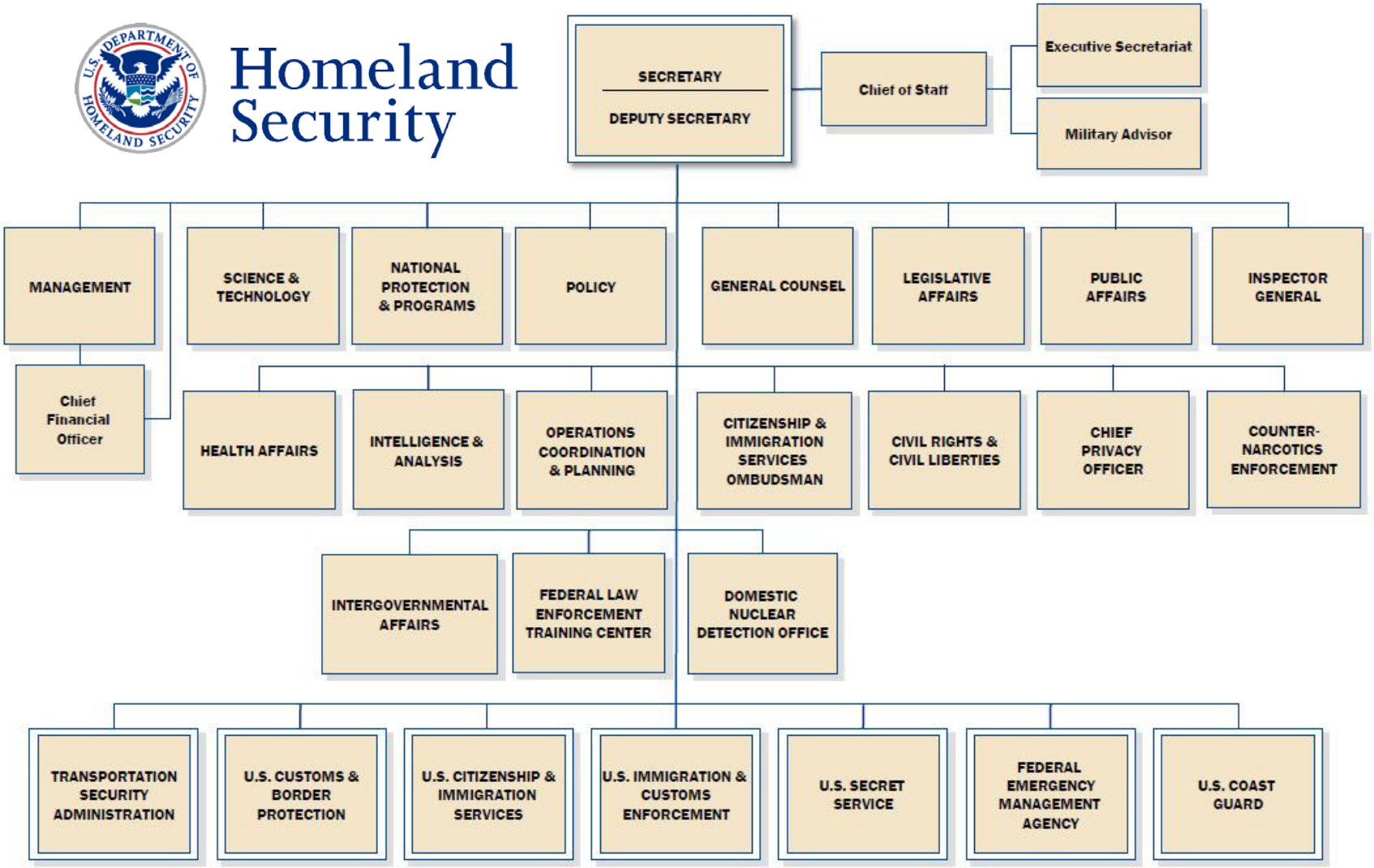
DHS Organization



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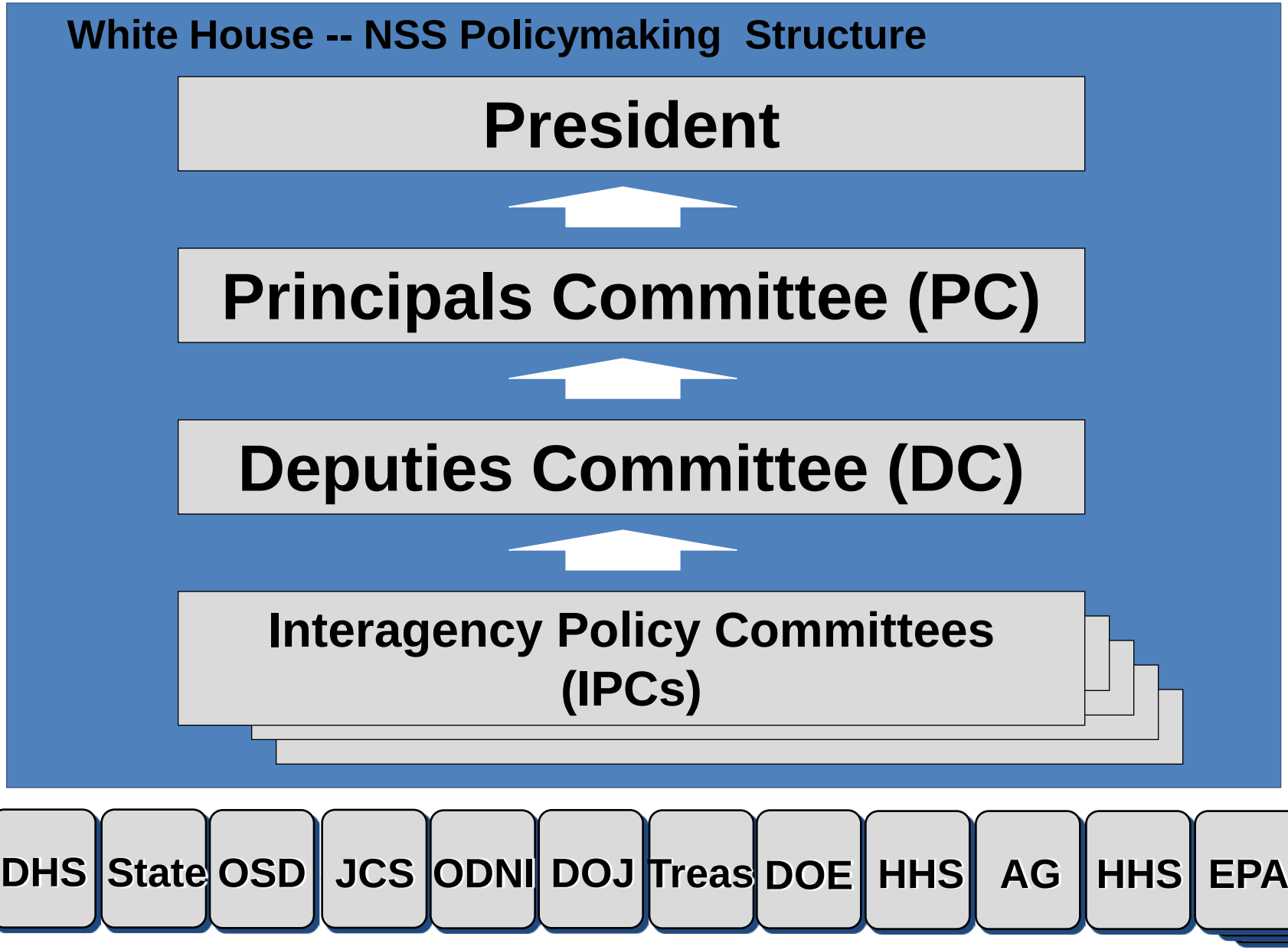
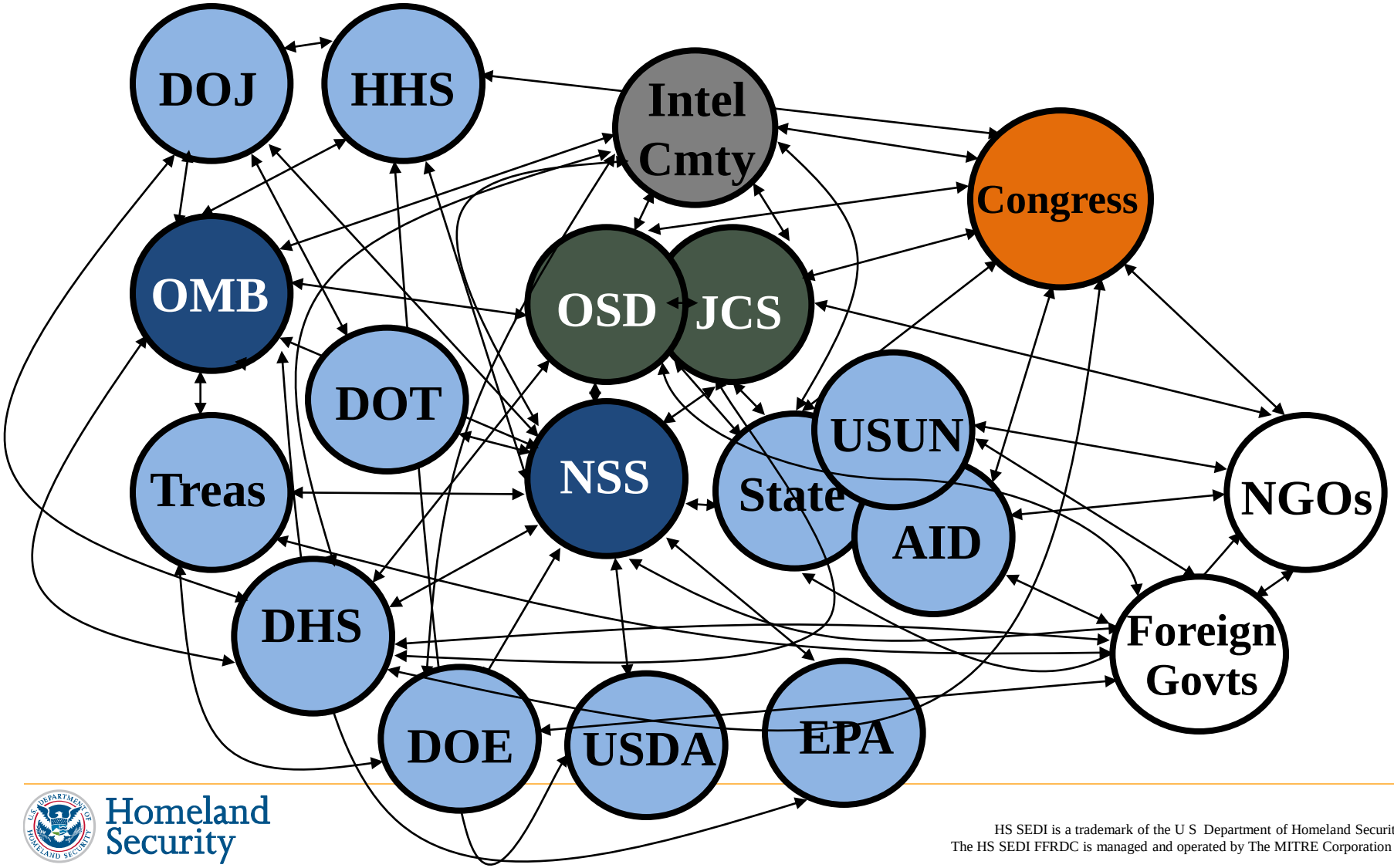
Interagency Process



Interagency Homeland Security Players and Connections:



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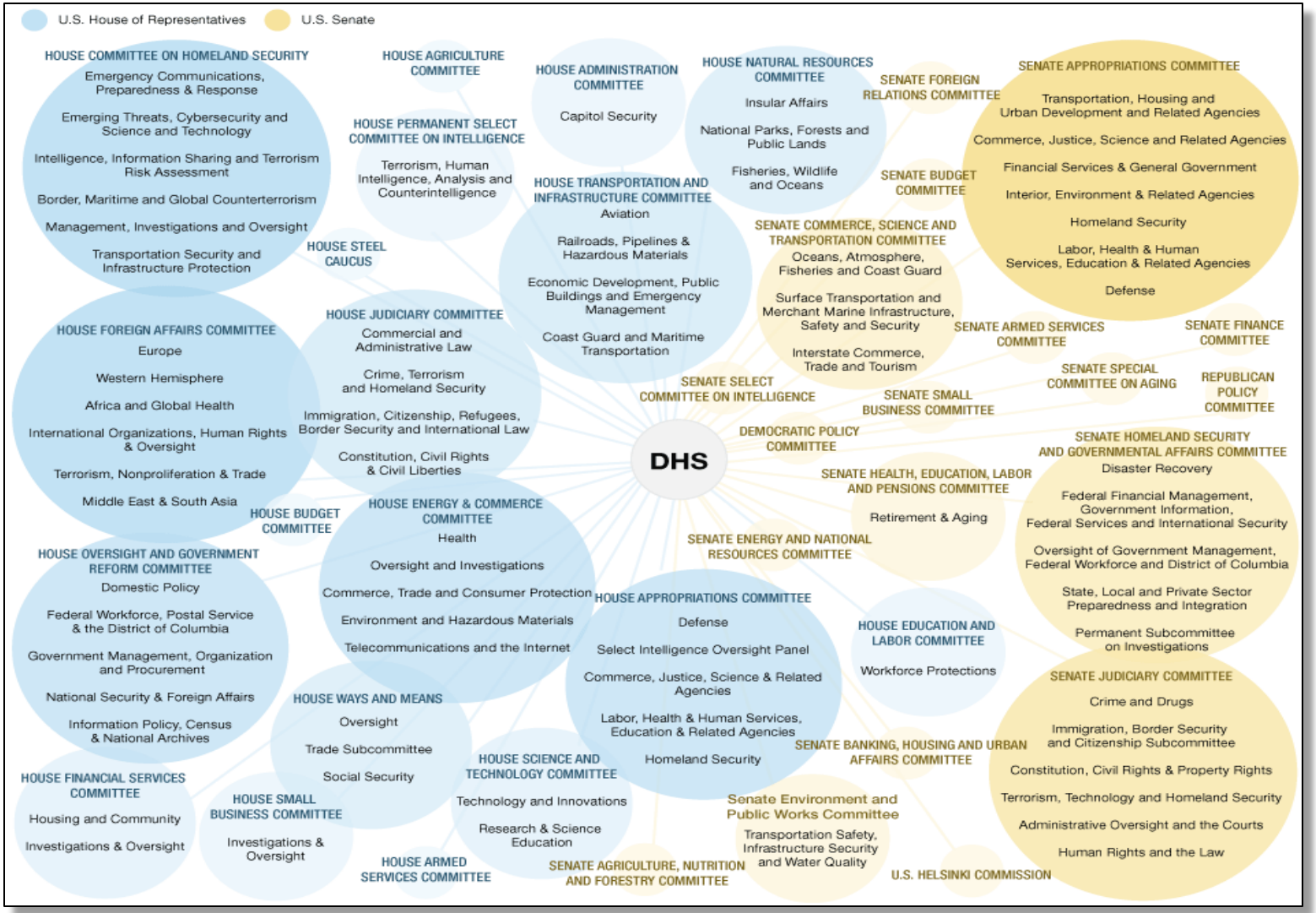
Congressional Oversight of DHS



Source: DHS Office Of Legislative Affairs

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Defining Homeland Security

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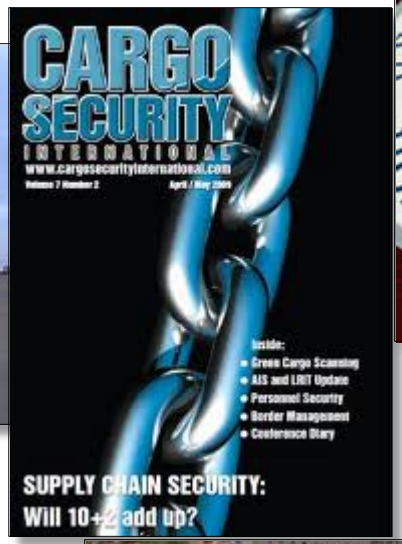
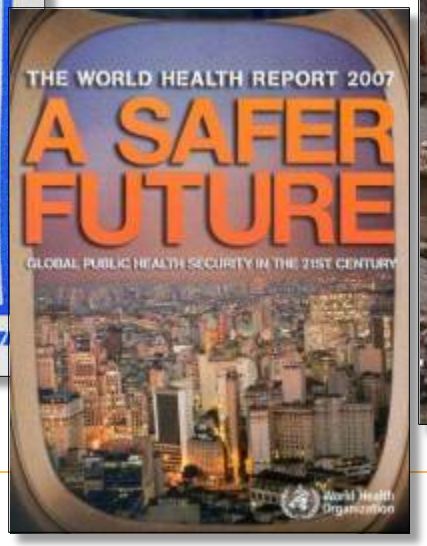
Defining Homeland Security





Homeland Security Definitions

Document	Definition
2007 *National Strategy for Homeland Security* (White House)	A concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.[a]
2008 *U.S. Department of Homeland Security Strategic Plan, Fiscal Years 2008-2013* (DHS)	A unified national effort to prevent and deter terrorist attacks, protect and respond to hazards, and to secure the national borders.[b]
2010 *National Security Strategy* (White House)	A seamless coordination among federal, state, and local governments to prevent, protect against and respond to threats and natural disasters.[c]
2010 *Quadrennial Homeland Security Review* (DHS)	A concerted national effort to ensure a homeland that is safe, secure, and resilient against terrorism and other hazards where American interests, aspirations, and ways of life can thrive.[d]
2010 *Bottom-Up Review* (DHS)	Preventing terrorism, responding to and recovering from natural disasters, customs enforcement and collection of customs revenue, administration of legal immigration services, safety and stewardship of the Nation's waterways and marine transportation system, as well as other legacy missions of the various components of DHS.[e]
2011 *National Strategy For Counterterrorism* (White House)	Defensive efforts to counter terrorist threats.[f]
2012 *Strategic Plan* (DHS)	Efforts to ensure a homeland that is safe, secure, and resilient against terrorism and other hazards.[g]

Congressional Research Service "Defining Homeland Security" April 3, 2012

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Anatomy of National Response and Preparedness

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Tiered Nature of National Response

Federal Response

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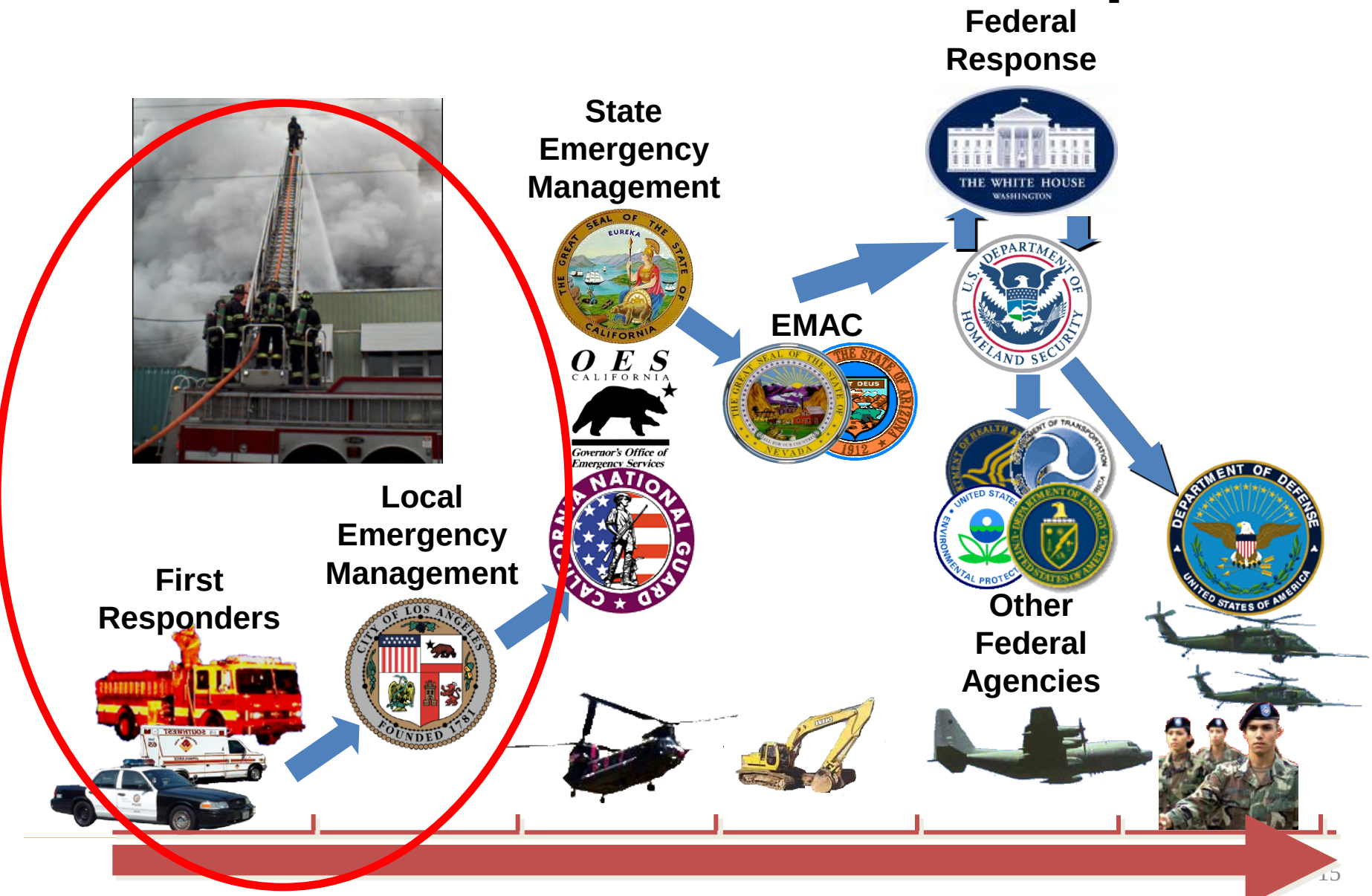
Tiered Nature of National Response



Federal Emergency Support Functions

ESF COORDINATING, PRIMARY, AND SUPPORT DESIGNATIONS

38

15

Agency	#1 - Transportation	#2 - Communications	#3 - Public Works and Engineering	#4 - Firefighting	#5 - Emergency Management	#6 - Mass Care, Emergency Assistance, Housing, and Human Services	#7 - Logistics Management and Resource Support	#8 - Public Health and Medical Services	#9 - Search and Rescue	#10 - Oil and Hazardous Materials Response	#11 - Agriculture and Natural Resources	#12 - Energy	#13 - Public Safety and Security	#14 - Long-Term Community Recovery	#15 - External Affairs
	Emergency Support Functions														
USDA			S		S										
USDA/FS	S	S	S	C/P											
DOC	S	S	S	S	S										
DOD	S	S	S	S	S										
DOD/USACE	S		C/P	S											
ED					S										
DOE	S		S		S										
HHS			S		S										
DHS	S	S	S		S										
DHS/FEMA	S	P	P	S	C/P	C/									
DHS/NCS		C/P													
DHS/USCG	S		S	S											
HUD					S										
DOI	S	S	S	S	S										
DOJ	S				S										
DOL			S		S										
DOS	S		S	S	S										

TABLE CONTI

C = ESF coordinator P = Primary agency S =

Note: Components or offices within a department or agency
primary agency. Refer to the ESF Annexes for details.

ESF-vi ESF Ann

Agency	#1 - Transportation	#2 - Communications	#3 - Public Works and Engineering	#4 - Firefighting	#5 - Emergency Management	#6 - Mass Care, Emergency Assistance, Housing, and Human Services	#7 - Logistics Management and Resource Support	#8 - Public Health and Medical Services	#9 - Search and Rescue	#10 - Oil and Hazardous Materials Response	#11 - Agriculture and Natural Resources	#12 - Energy	#13 - Public Safety and Security	#14 - Long-Term Community Recovery	#15 - External Affairs
	Emergency Support Functions														
DOT	C/P		S		S	S	S	S		S	S	S		S	S
TREAS					S	S							S	S	S
VA			S		S	S	S	S					S		S
EPA			S	S	S			S		C/P	S	S	S	S	S
FCC		S			S										S
GSA	S	S	S		S	S	C/P	S		S	S				S
NASA					S		S		S				S		S
NRC			S		S					S		S			S
OPM					S		S								S
SBA					S	S								P	S
SSA						S							S		S
TVA			S		S							S			S
USAID								S	S						S
USPS	S				S	S		S			S		S		S
ACHP											S				
ARC			S		S	S		S			S			S	
CNCS			S			S								S	
DRA														S	
HENTF											S				
NARA											S				
NVOAD						S								S	

C = ESF coordinator P = Primary agency S = Support agency

Note: Components or offices within a department or agency are not listed on this chart unless they are the ESF coordinator or a primary agency. Refer to the ESF Annexes for details.

January 2008 ESF Annexes Introduction ESF-vii

National Preparedness

PPD-8 Functions

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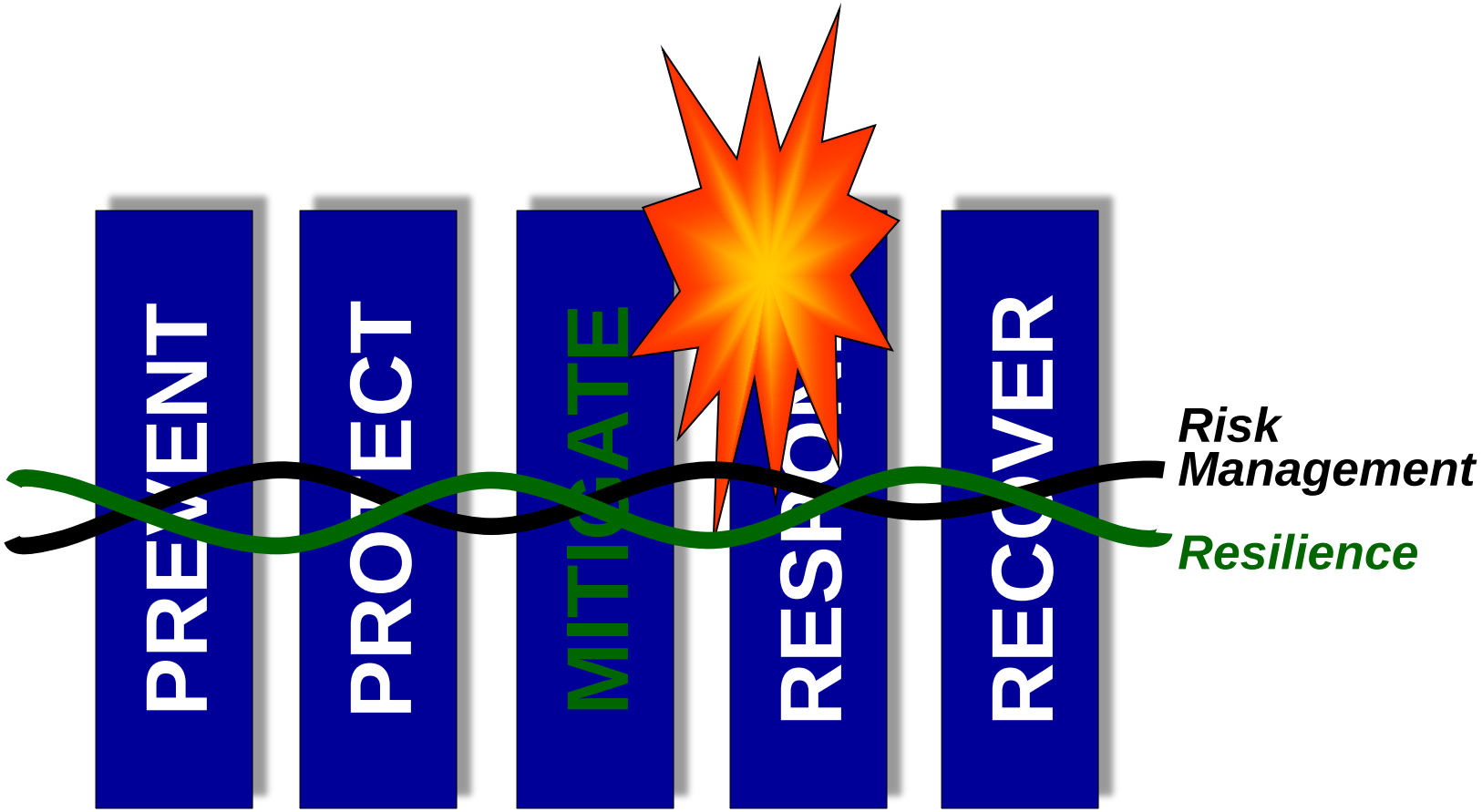
National Preparedness
PPD-8 Functions



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Key Challenges

- Optimizing for Extreme & Diverse Range of Threats
  - Managing Risk & Enhancing Resilience
- Integrating Key Functions, Unifying the Enterprise

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Missions with Widest Threat Spectrums

- ✓ **Preventing & Protecting Against Terrorism**
- **Securing & Managing Our Borders**
- **Enforcing & Administering Our Immigration Laws**
- ✓ **Safeguarding & Securing Cyberspace**
- ✓ **Ensuring Resilience to Disasters**
- ✓ ***Maturing & Strengthening the Homeland Security Enterprise***

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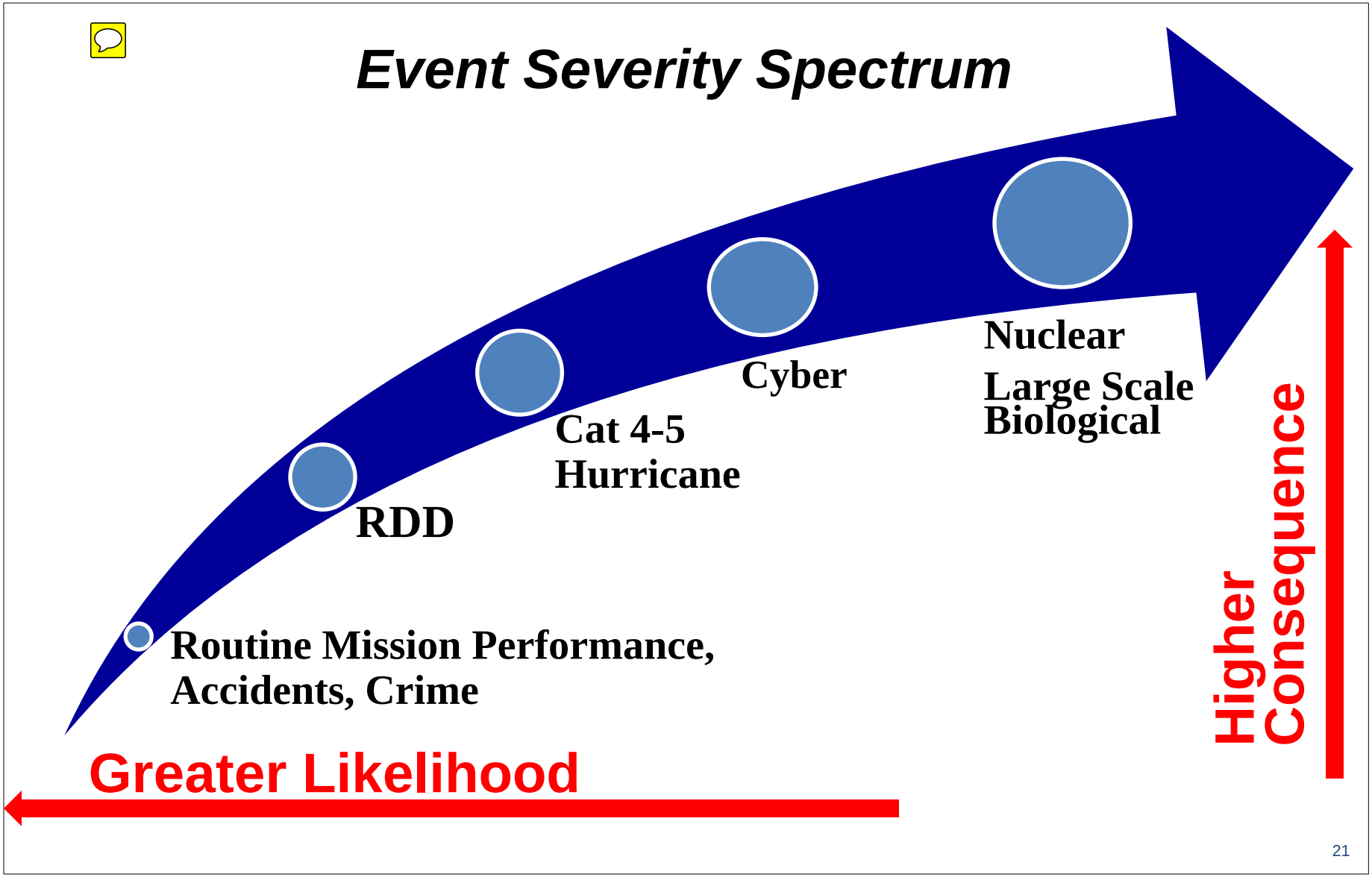
Probability & Consequence



Probability & Consequence

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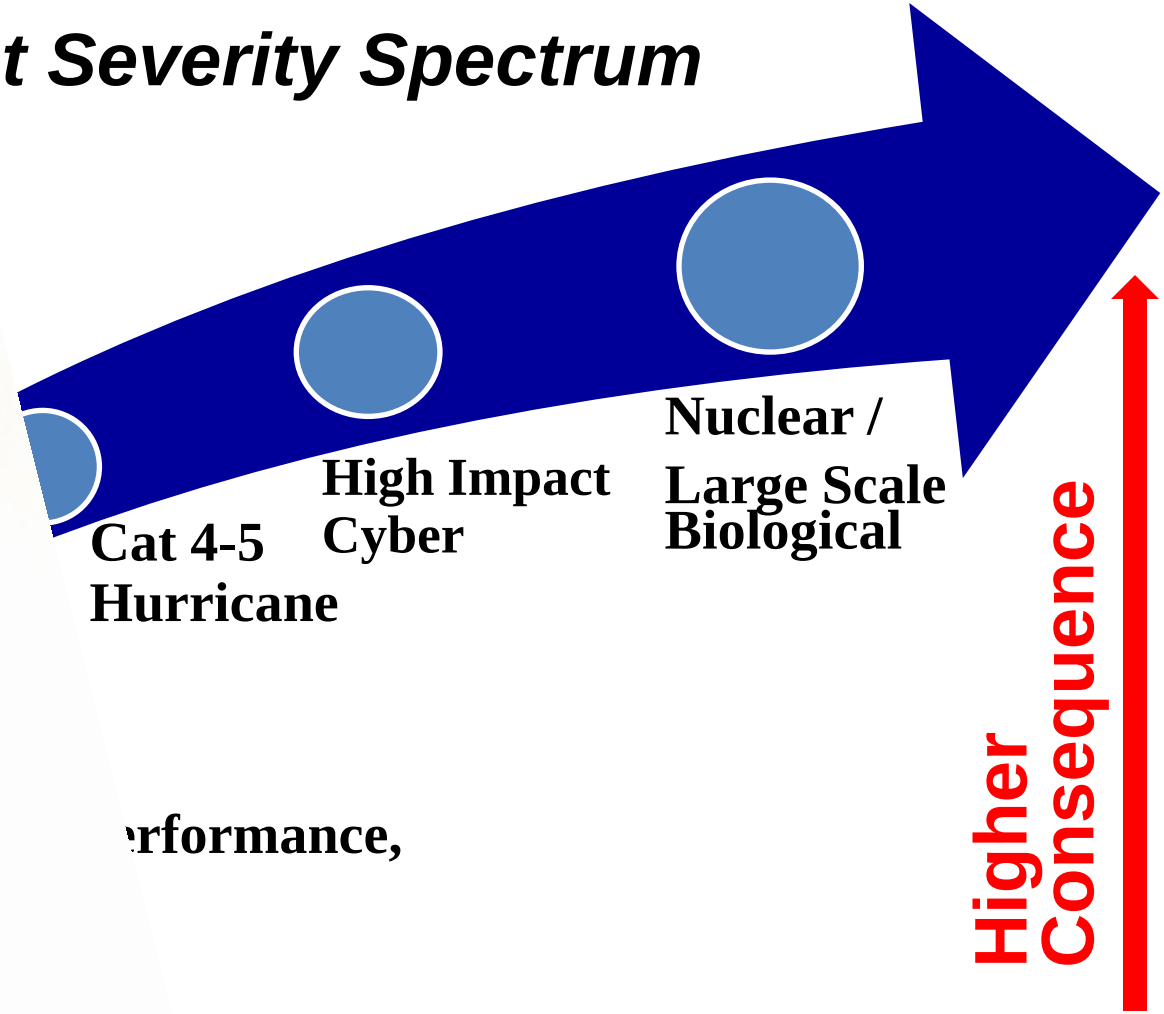

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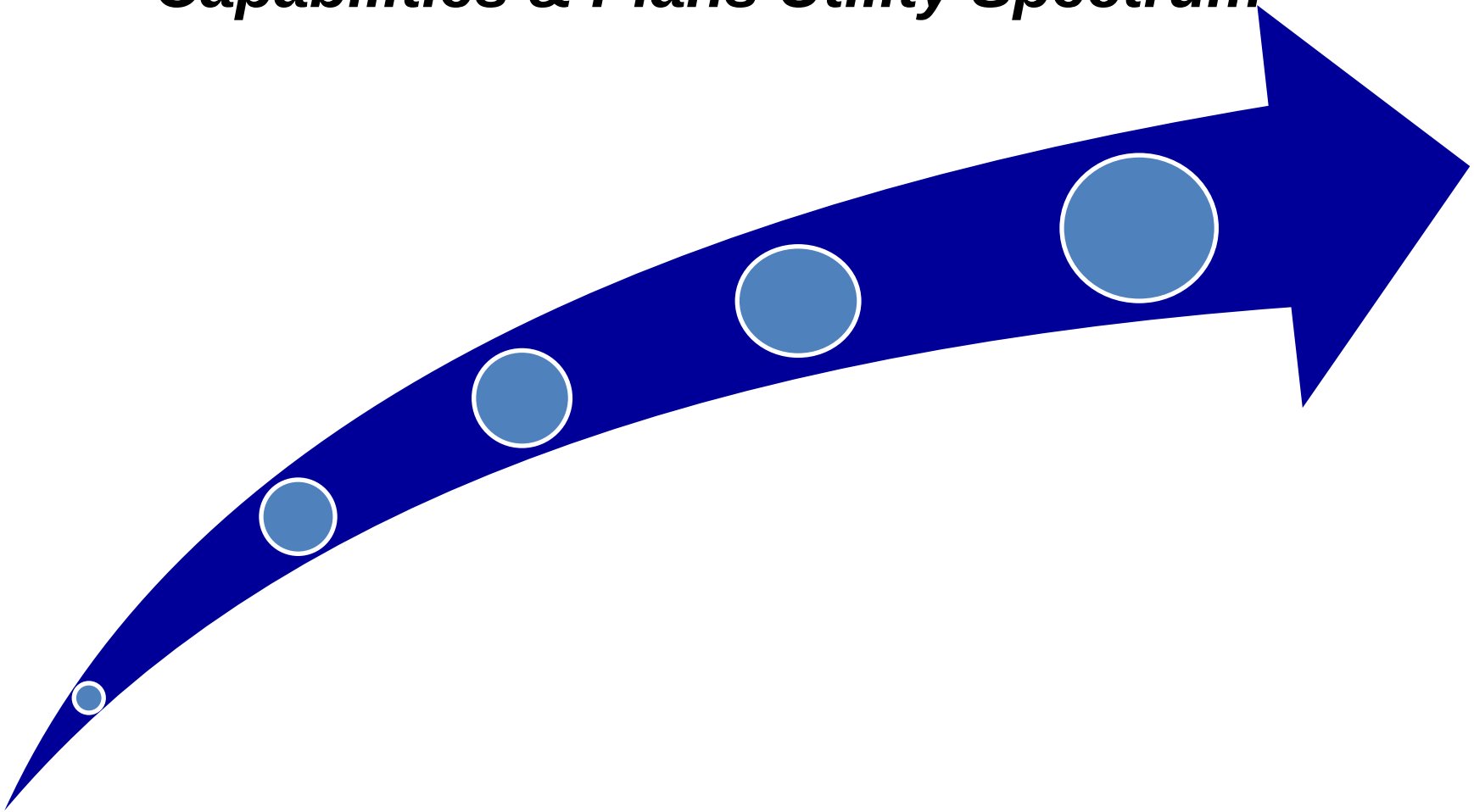
Systems Optimization

Capabilities & Plans Utility Spectrum



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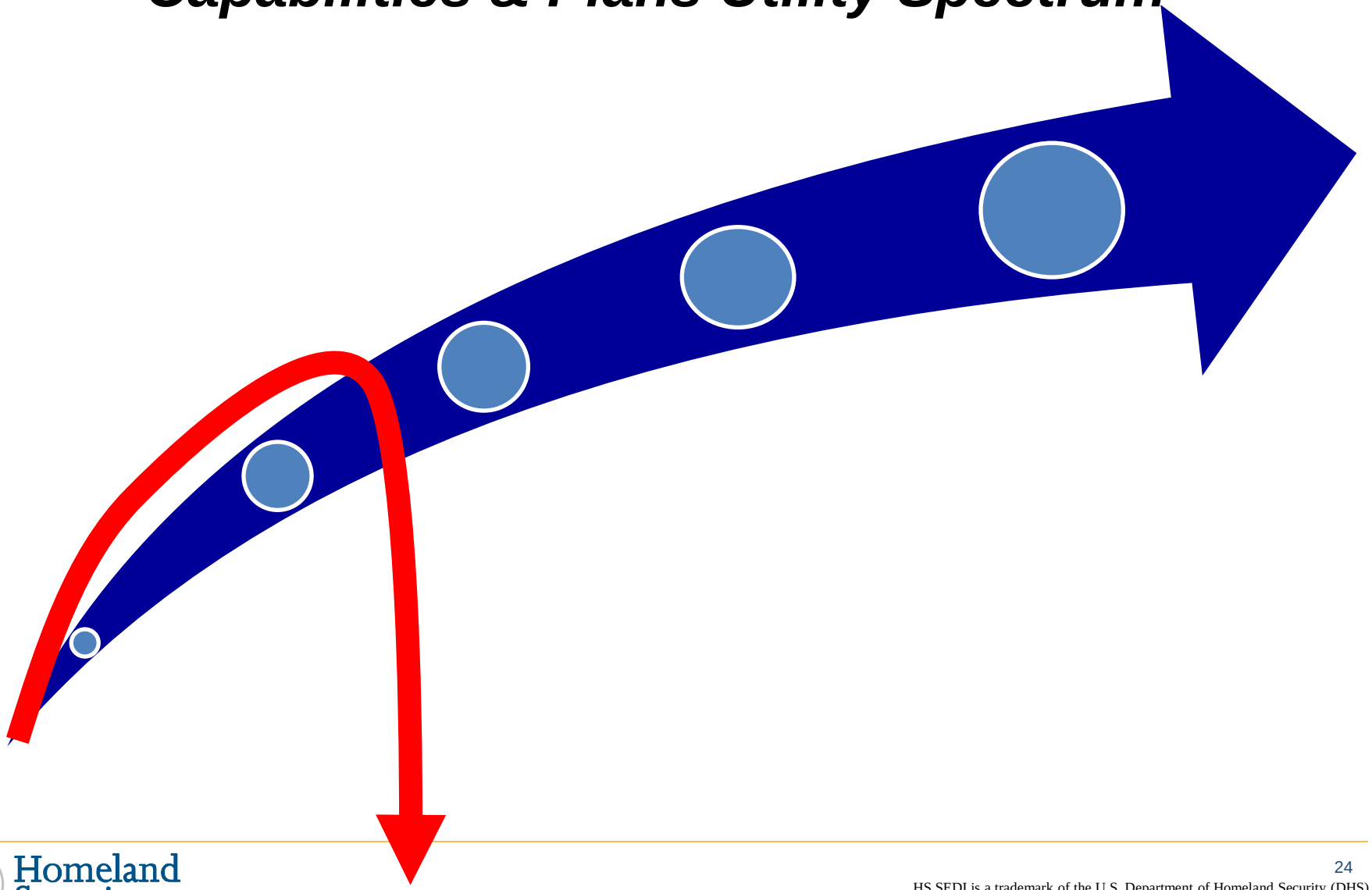
Systems Optimization

Capabilities & Plans Utility Spectrum



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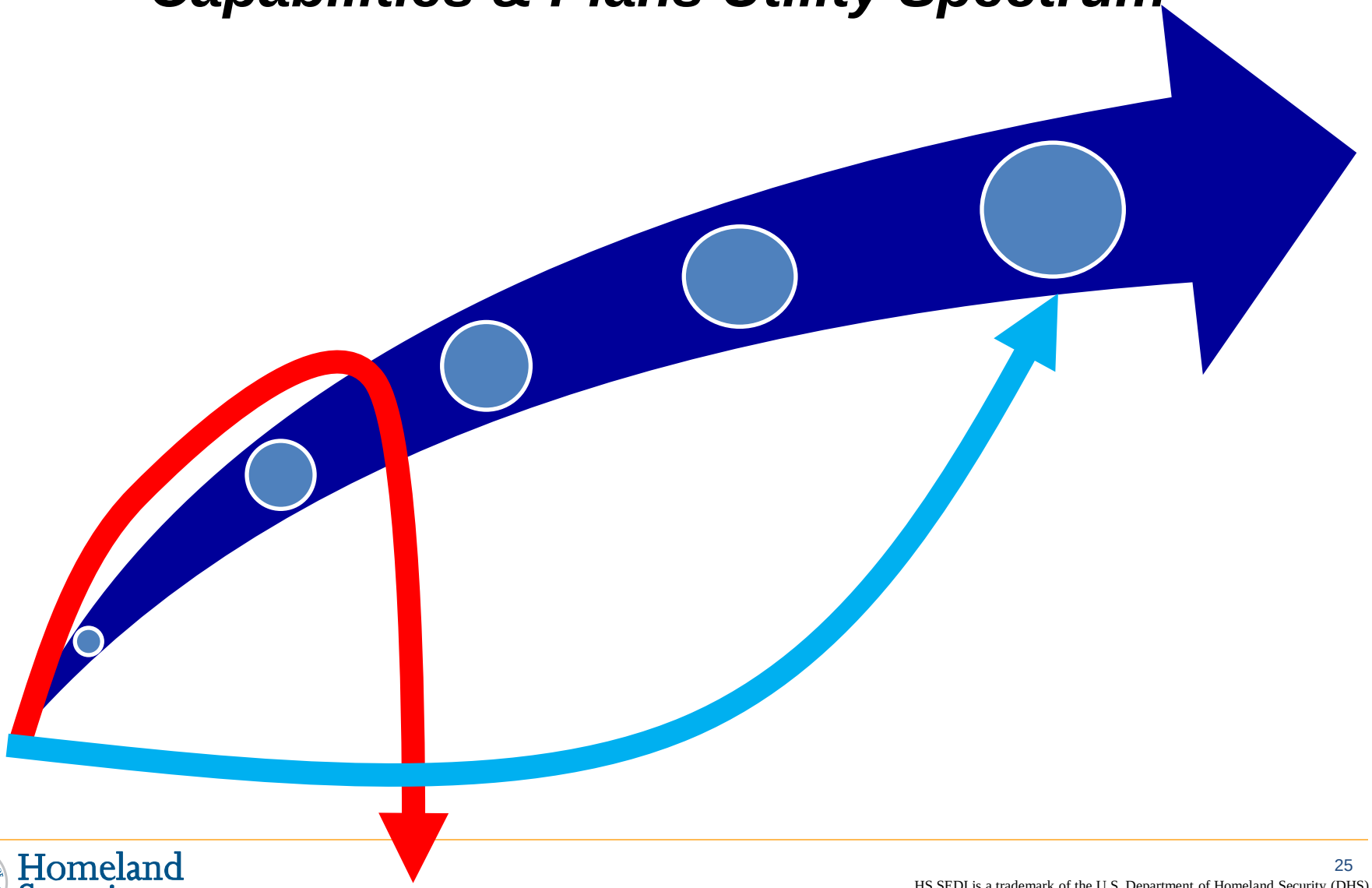
Systems Optimization

Capabilities & Plans Utility Spectrum



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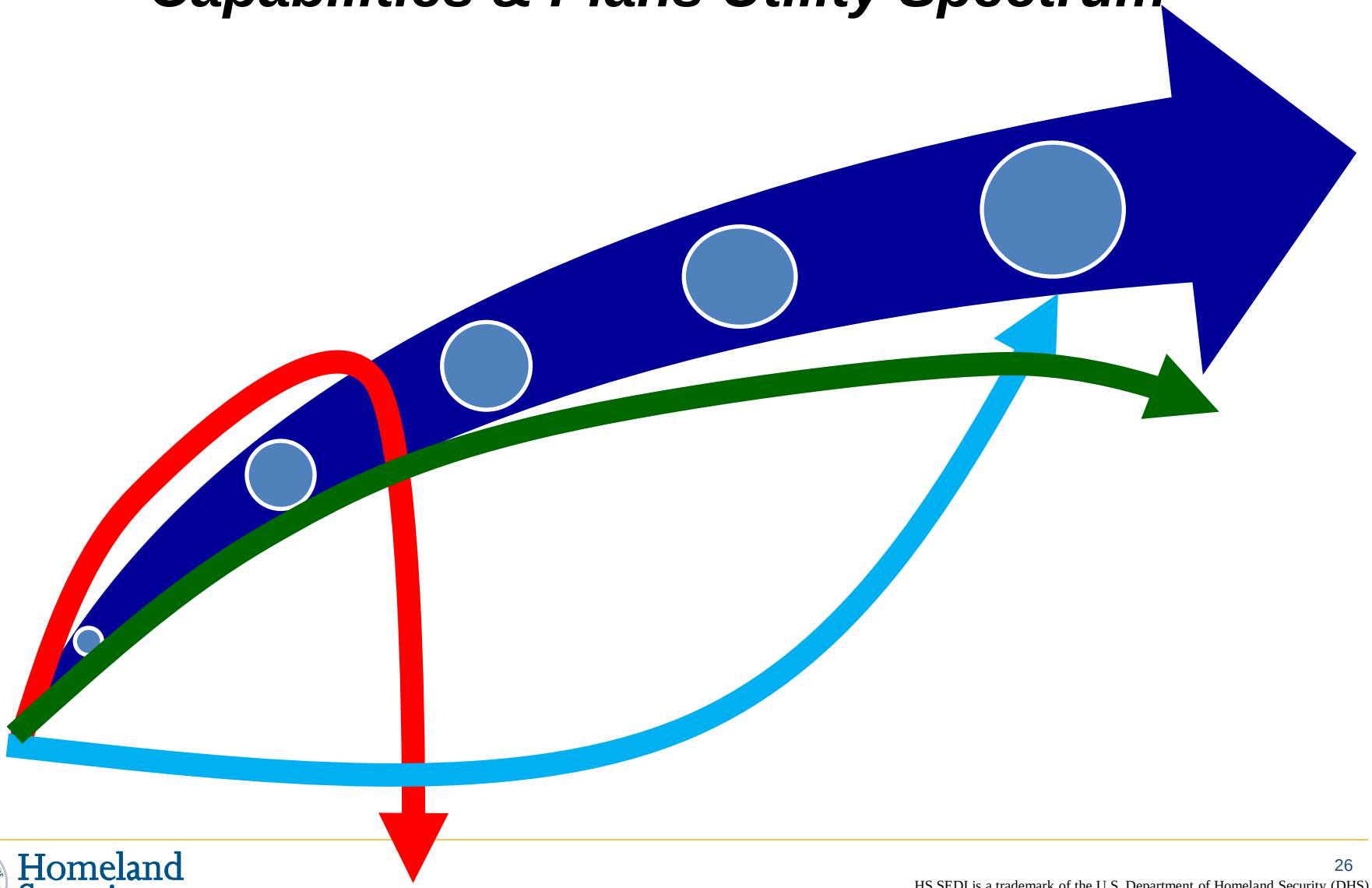
Systems Optimization

Capabilities & Plans Utility Spectrum



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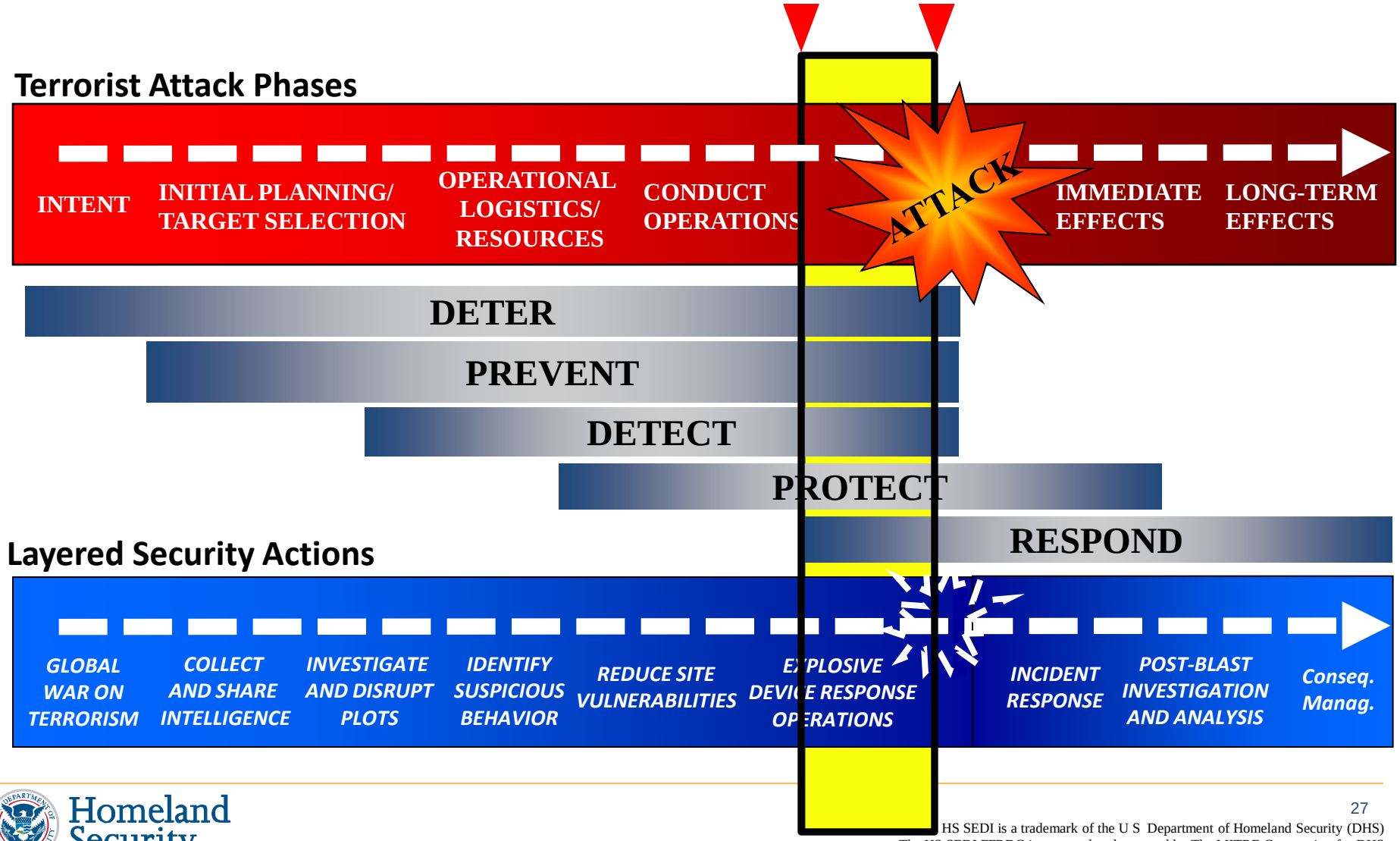
Threat Chain Systems View

Case A: *Stovepiped Approach*



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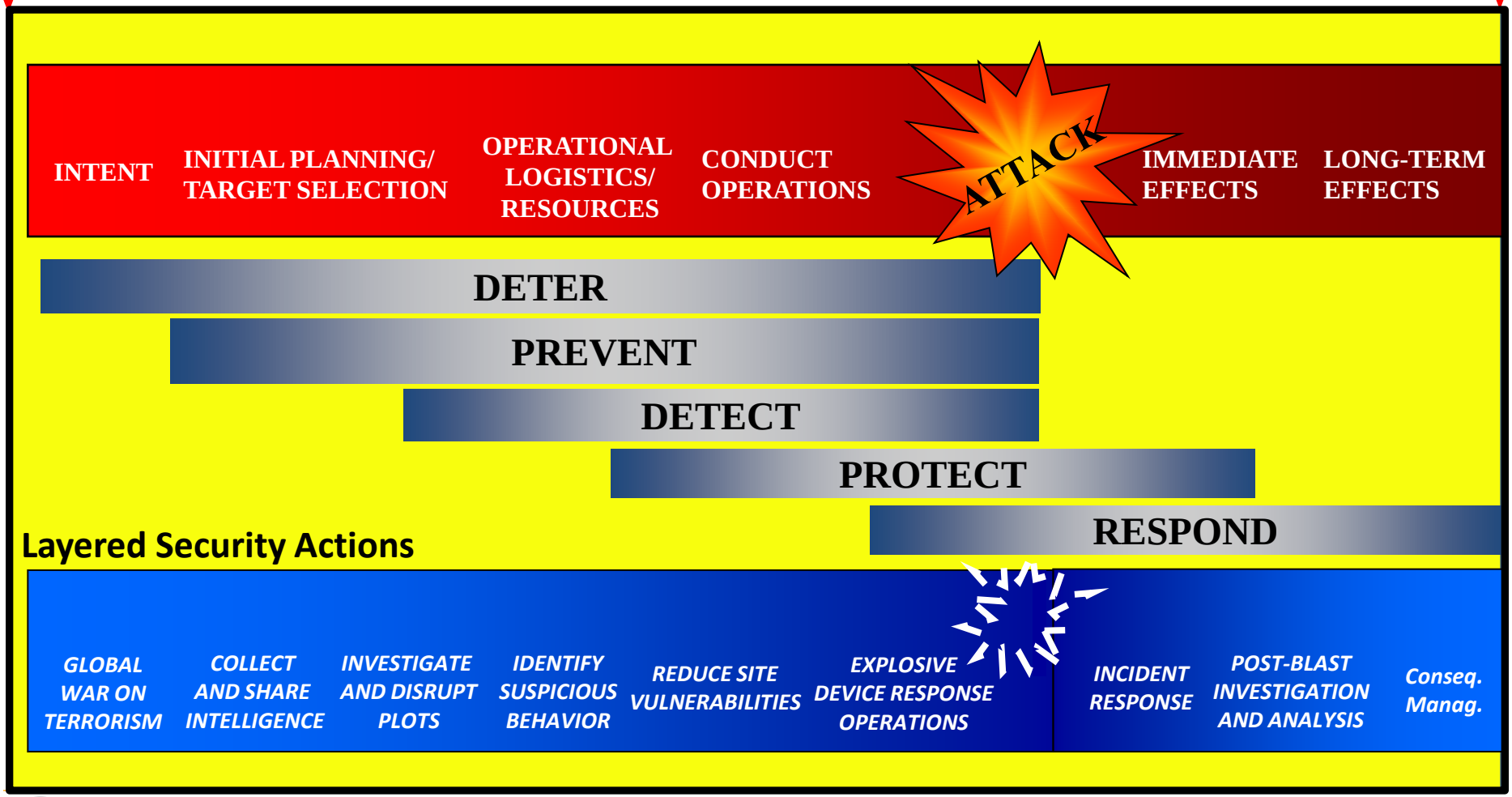
Threat Chain Systems View

Case B: *Enterprise Systems Approach*



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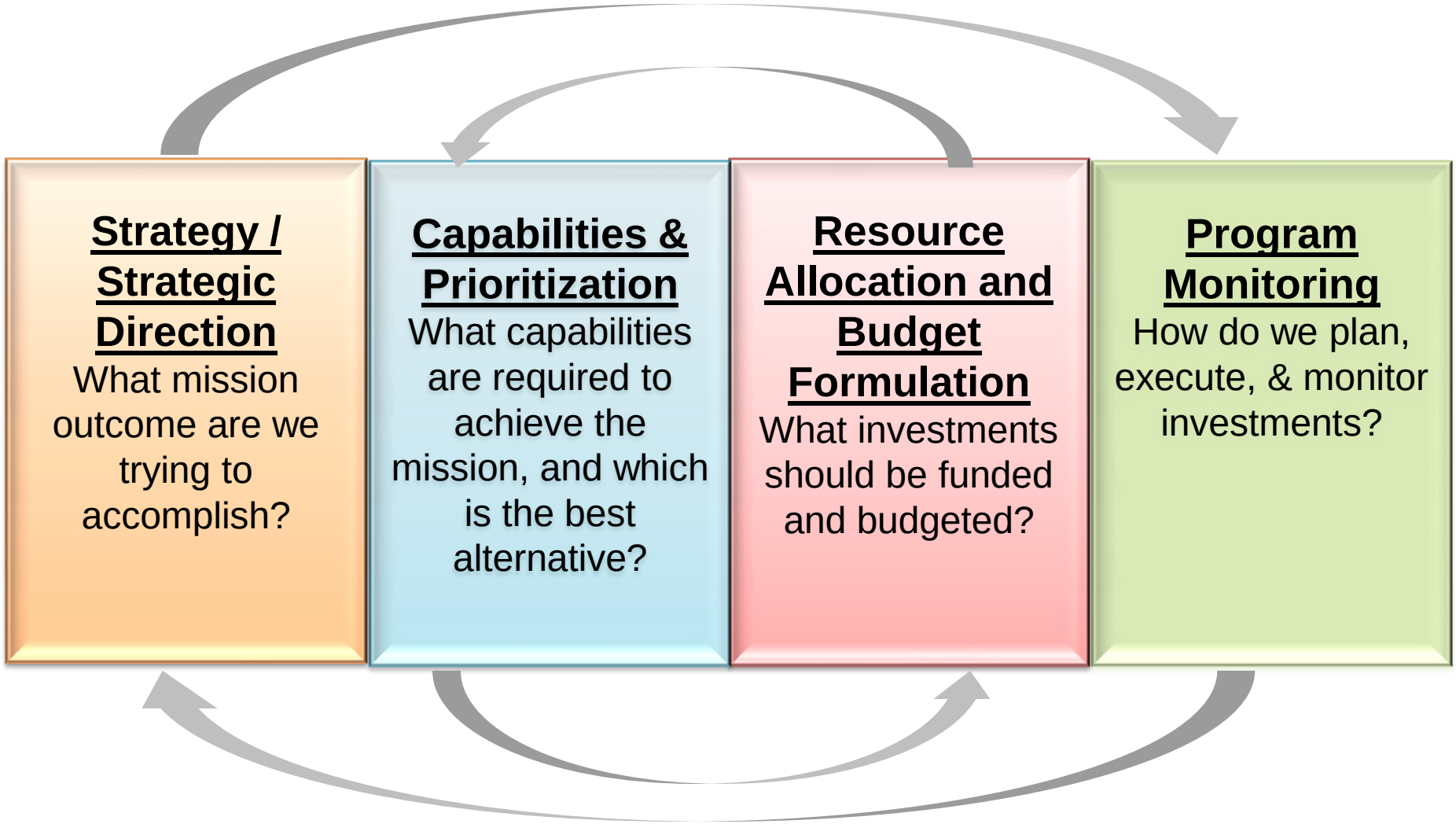
The Need for Enhanced Integration



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The Latest Technology Is Not Always the Best Solution

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Questions?

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